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February 19, 1999

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AUBREY L. BROOKS (1872-1958) W.H. HOLDERNESS (1904-1965) L.P. McLENDON (1890-1968) KENNETH M. BRIM (1898-1974) C.T. LEONARD, JR. (1929-1983) CLAUDE C. PIERCE (1913-1988) THORNTON H. BROOKS (1912-1988) G. NEIL DANIELS (1911-1997)

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WASHINGTON OFFICE 2000 L STREET N.W., SUITE 200 WASHINGTON, D.C. 20036

Ms. Magalie Roman Salas Secretary Federal Communications Commission 445 12th Street, S.W., TWA325 Washington, DC 20554

Re: Petition for Rule Making

Station KOCO-DT, Oklahoma City, Oklahoma

Dear Ms. Salas:

Transmitted herewith on behalf of Ohio/Oklahoma Hearst-Argyle Television, Inc., licensee of Television Station KOCO-TV, Oklahoma City, Oklahoma and permittee of Digital Television Station KOCO-DT, are an original and four copies of a Petition for Rule Making requesting amendment of the DTV Table of Allotments, Section 73.622(b) of the Commission's Rules.

If any questions should arise during the course of your consideration of this matter, it is respectfully requested that you communicate with this office.

Sincerely,

BROOKS, PIERCE, McLENDON, HUMPHREY & LEONARD, L.L.P.

Mark L. Prak
Counsel to

Ohio/Oklahoma Hearst-Argyle Televison, Inc.

MJP/kws Enclosures c/word/hearst/koco/ms21999

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Before the FEDERAL COMMUNICATIONS COMMISSIONFEB 22 1999

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In the Matter of)	I OC MAIL ROUN
Amendment of Section 73.622(b))	MM Docket No
DTV Table of Allotments Television Broadcast Stations)	RM
Television Broadcast Stations	1	

To: Chief, Allocations Branch
Policy & Rules Division
Mass Media Bureau

PETITION FOR RULE MAKING

Ohio/Oklahoma Hearst-Argyle Television, Inc. ("Petitioner"), permittee of Television Station KOCO-DT, Oklahoma City, Oklahoma, by its counsel, hereby petitions the Commission, pursuant to Section 1.401 of the Commission's Rules, to amend the Commission's DTV Table of Television Allotments (Section 73.622(b) of the Commission's Rules) by amending Petitioner's DTV channel allotment from Channel 16 to Channel 7. In support hereof, Petitioner states as follows:

- 1. Petition has been authorized to construct DTV television station KOCO-DT, Oklahoma City, Oklahoma. Petitioner's DTV facilities are currently authorized to operate on Channel 16.
- 2. Pursuant to Section 73.622(a) of the Commission's Rules, Petitioner hereby respectfully requests the Commission to amend the DTV Table of Allotments by changing KOCO-DT's channel allotment from Channel 16 to Channel 7.
- 3. Requests to amend the DTV table of allotments by changing the channel of an allotment in the DTV table are evaluated for technical acceptability using the engineering criteria set forth in Section 73.623(c) of the Commission's rules. Attached hereto and incorporated by

reference is an Engineering Statement prepared by Bernard R. Segal, P.E., which demonstrates compliance with Section 73.623(c), as follows:

- a. Petitioner proposes to operate from the same tower site as the current KOCO-TV NTSC operation.
- b. The Petition complies with the principal community coverage requirements of Section 73.625(a). (See Section 73.623(c)(1)).
- c. The Petition will not result in more than an additional 2 percent of the population served by another station being subject to interference. In addition, no new interference will be caused to any station that already experiences interference to 10 percent or more of its population or that would result in a station receiving interference in excess of 10 percent of its population. (See Section 73.623(c)(2)).
- 4. The public interest would be served by co-locating the KOCO-TV NTSC transmitter site with the KOCO-DT transmitter site.

Conclusion

For the foregoing reasons, Petitioner respectfully requests that the Commission grant the instant Petition and amend the DTV Table of Allotments (Section 73.622(b) of the Commission's rules) to authorize KOCO-DT to operate on Channel 7, and to amend Petitioner's DTV construction permit to reflect the amended allotment.

Dated: February 19, 1999

Respectfully submitted,

OHIO/OKLAHOMA HEARST-ARGYLE TELEVISION, INC.

By:

Mark J. Prak

Brooks, Pierce McLendon, Humphrey & Leonard, L.L.P.

Post Office Box 1800

Raleigh, North Carolina 27602

(919) 839-0300

Its Counsel

The instant Engineering Statement has been prepared on behalf of Ohio/Oklahoma Hearst-Argyle Television, Inc., the licensee of NTSC station KOCO-TV, Oklahoma City, Oklahoma. Engineering support is provided for a petition to amend the DTV Table of Allotments, Section 73.622(b) of the Rules. The FCC allotted channel 16 for transitional DTV use for NTSC station KOCO-TV. Station KOCO-TV operates on VHF channel 5. The instant Engineering Statement provides support for amendment of the DTV Table of Allotments to specify channel 7 in lieu of channel 16.

The proposed channel 7 DTV allotment is for operation from the same site as the current KOCO-TV operation. The geographic coordinates for the KOCO-TV tower location are: 35° 33′ 45″ North Latitude; 97° 29′ 24″ West Longitude. The foregoing geographic coordinates are based on NAD 1927. The channel 7 DTV antenna will be installed on top of the existing KOCO-TV tower within an approximately 40 foot aperture that is available below the channel 5 KOCO-TV antenna. The antenna radiation center will be 797 meters

Engineering Statement Ohio/Oklahoma Hearst-Argyle Television, Inc. Oklahoma City, Oklahoma Page 2

above mean sea level. The antenna radiation center height above average terrain will be 446 meters. Terrain elevations from 3.2-16.1 km along the standard eight radials were obtained from the National Geophysical Data Center 30-second database.

A directional antenna will be employed with maximum effective radiated power of 37.5 kW. The particulars for the directional antenna are provided in Figures 1 through 4. Figure 1 is the azimuth pattern for the antenna as provided by the manufacturer. Figure 2 is a tabulation of relative field and effective radiated power data for the antenna. Figure 3 is the elevation pattern for the antenna and Figure 4 is a tabulation of data for the elevation pattern of Figure 3.

Studies are provided which demonstrate that the proposed change in the allotment table will permit a facility that satisfies the coverage and allocation criteria of Section 73.623(c) of the FCC Rules. Figure 5 is a map demonstrating the extent of coverage of the 36 dB μ , F(50,90) contour for the proposed allotment. Figure 6 is a tabulation of terrain elevation data and distances to the 36 dB μ , F(50,90) contour for the proposed allotment facilities.

Engineering Statement

Page 3

Ohio/Oklahoma Hearst-Argyle Television, Inc. Oklahoma City, Oklahoma

Figure 5 demonstrates that the entire community of Oklahoma City will be encompassed by the DTV coverage contour and the proposed allotment, therefore, complies with the principal community coverage requirement of Section 73.625(a).

As to allocation concerns, the study provided herein as Figure 7 demonstrates that no NTSC station would receive interference from the proposed KOCO-DT channel 7 facility which affects population in excess of the "de minimis" 2% allowable level. The cumulative interference, where the proposed KOCO-DT facility would cause interference to any NTSC station, will not exceed the maximum allowable of 10%.

No DTV allotments on VHF channels 7 and 8 are close enough for concern. The channel 8 DTV allotment to Cheyenne, Oklahoma, is the closest to the KOCO-DT proposed channel 7 allotment. The separation of 197.4 km for this first adjacent channel situation is well beyond the range for consideration.

Engineering Statement Ohio/Oklahoma Hearst-Argyle Television, Inc. Oklahoma City, Oklahoma Page 4

The study of Figure 7 was performed using an FCC matched computer analysis which takes into account both NTSC and DTV allocation factors. A computer using an Alpha processor was employed in conjunction with the FCC's FLR software. For each station studied, the reference information from Appendix B of the Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket Number 87-268 is listed in Figure 7 for comparison with the results obtained independently using the Alpha processor with the FCC's FLR software. The independently determined calculation results are in good agreement with the FCC's Appendix B results.

Two studies were performed. The first study took into account the current Appendix B allotment facilities that provided a reference for comparison with the results of the second study which included the effect of the proposed new channel 7 DTV allotment for KOCO-DT use. In no instance would the FCC allowable 2% de minimis interference level be exceeded toward any NTSC station, and in no instance where the proposed KOCO-DT facility would cause interference, would the maximum cumulative 10% allowable interference limit be exceed to any NTSC station. As stated earlier, no DTV interference concerns are implicated. The proposed allotment satisfies all FCC criteria.

Engineering Statement Ohio/Oklahoma Hearst-Argyle Television, Inc. Oklahoma City, Oklahoma Page 5

The channel 7 allotment proposed for KOCO-DT use would provide 96.1% population service replication relative to the existing KOCO-TV Grade B service population

I declare under penalty of perjury that the foregoing is true and correct. Executed on February 12, 1999.

Benned R. Legal, P.E.

Bernard R. Segal, P.E.



Date

10-Feb-99

Call Letters

KOCO-DT

THP-C2-4-1

7 Channel

Location

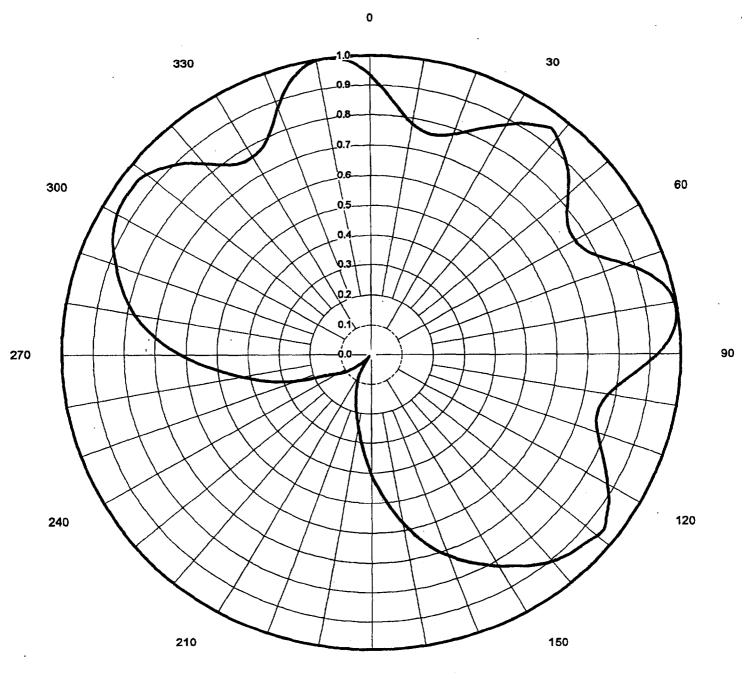
Customer Antenna Type Oklahoma City, OK

AZIMUTH PATTERN

Gain

1.80 Calculated / Measured (2.55 dB) Calculated Frequency

177.00 MHz **THP-C2-7** Drawing#



Antenna Azimuth Radiation Pattern Data

Azimuth (deg. T)	Relative <u>Field</u>	Effective Radiated Power (dBk)	Azimuth (deg. T)	Relative <u>Field</u>	Effective Radiated <u>Power</u> (dBk)
0	0.936	15.2	190	0.241	3.38
10	0.782	13.6	200	0.140	-1.34
20	0.778	13.6	210	0.063	-8.27
30	0.881	14.6	218**	0.006	-44.4
40	0.941	15.2	220	0.012	-22.7
50	0.837	14.2	230	0.071	-7.24
60	0.762	13.4	240	0.131	-1.91
70	0.873	14.6	250	0.260	4.04
80	0.996	15.7	260	0.428	8.37
90	0.927	15.1	270	0.617	11.5
100	0.778	13.6	280	0.774	13.5
110	0.778	13.6	290	0.875	14.6
120	0.881	14.6	300	0.944	15.2
130	0.949	15.3	310	0.940	15.2
140	0.907	14.9	320	0.837	14.2
150	0.819	14.0	330	0.762	13.4
160	0.719	12.9	340	0.873	14.6
170	0.572	10.9	350	0.997	15.7
180	0.402	7.83	352*	1.00	15.7

^{**} Local minimum bearing.

^{*} Local maximum bearing.



Date
Call Letters

Location

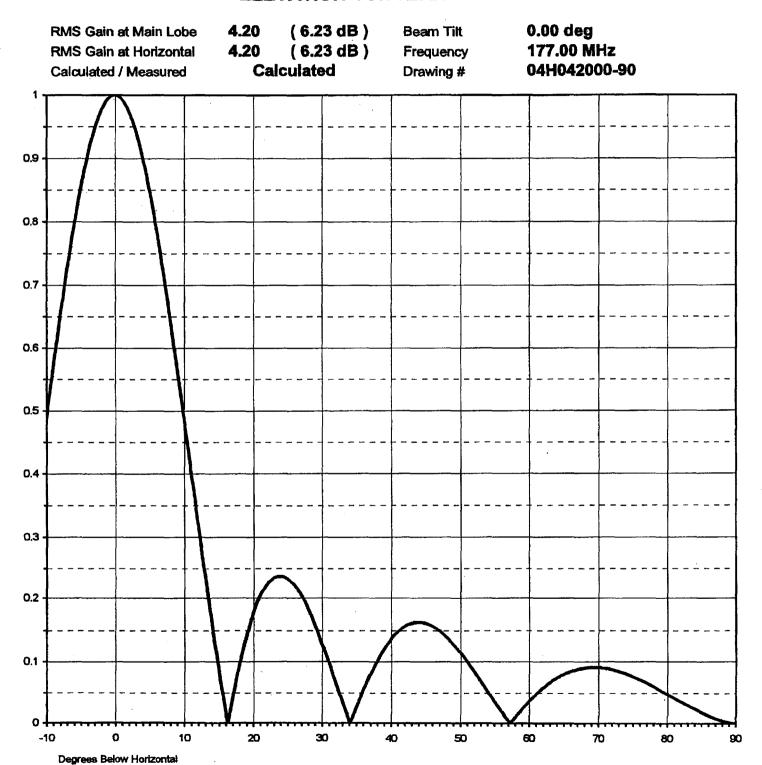
Customer Antenna Type 10-Feb-99

KOCO-DT Channel 7

Oklahoma City, OK

THP-C2-4-1

ELEVATION PATTERN



7



Date

10-Feb-99

Call Letters

KOCO-DT Channel Oklahoma City, OK

Location Customer

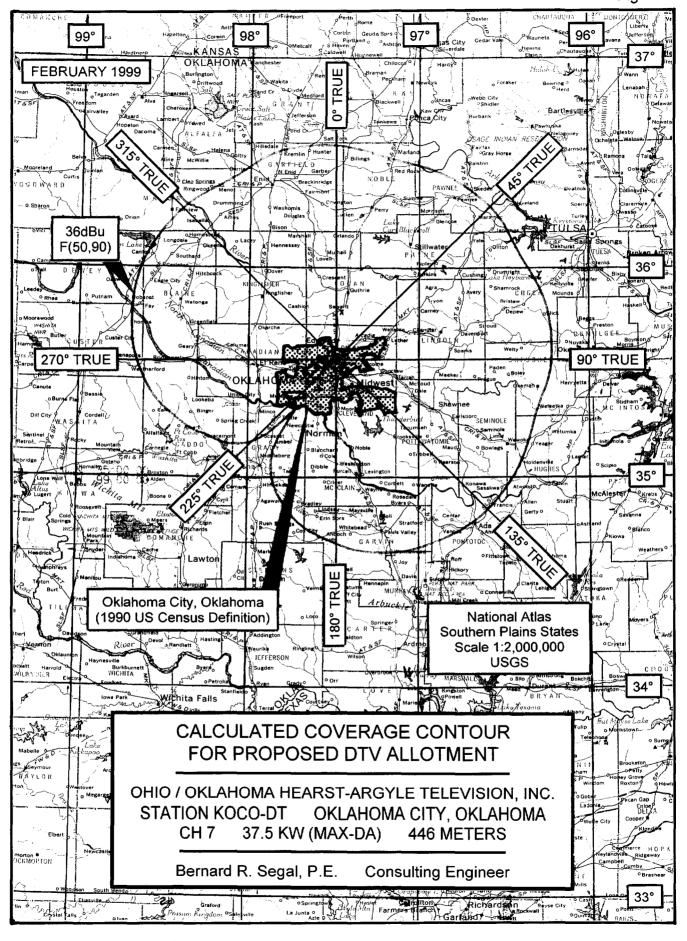
Antenna Type

THP-C2-4-1

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: 04H042000-90

Angle	Field										
-10.0	0.487	2.4	0.965	10.6	0.445	30.5	0.117	51.0	0.102	71.5	0.089
-9.5	0.528	2.6	0.959	10.8	0.428	31.0	0.102	51.5	0.094	72.0	0.088
-9.0	0.569	2.8	0.952	11.0	0.412	31.5	0.086	52.0	0.086	72.5	0.086
-8.5	0.609	3.0	0.945	11.5	0.370	32.0	0.070	52.5	0.079	73.0	0.085
-8.0	0,649	3.2	0.938	12.0	0.328	32.5	0.054	53.0	0.070	73.5	0.083
-7.5	0.687	3.4	0.930	12.5	0.287	33.0	0.039	53.5	0.062	74.0	0.081
-7.0	0.723	3.6	0.922	13.0	0.246	33.5	0.023	54.0	0.054	74.5	0.079
-6.5	0.758	3.8	0.913	13.5	0.206	34.0	0.007	54.5	0.046	75.0	0.076
-6.0	0.792	4.0	0.904	14.0	0.168	34.5	0.008	55.0	0.038	75.5	0.074
-5.5	0.823	4.2	0.894	14.5	0.130	35.0	0.023	55.5	0.030	76.0	0.071
-5.0	0.852	4.4	0.884	15.0	0.094	35.5	0.037	56.0	0.022	76.5	0.069
-4.5	0.879	4.6	0.874	15.5	0.059	36.0	0.051	56.5	0.014	77.0	0.066
-4.0	0.904	4.8	0.863	16.0	0.025	36.5	0.064	57.0	0.006	77.5	0.063
-3.5	0.926	5.0	0.852	16.5	0.007	37.0	0.077	57.5	0.001	78.0	0.060
-3.0	0.945	5.2	0.841	17.0	0.036	37.5	0,088	58.0	0.008	78.5	0.057
-2.8	0.952	5.4	0.829	17.5	0.064	38.0	0.099	58.5	0.015	79.0	0.054
-2.6	0.959	5.6	0.817	18.0	0.090	38.5	0.109	59.0	0.022	79.5	0.051
-2.4	0.965	5.8	0.804	18.5	0.114	39.0	0.119	59.5	0.029	80.0	0.048
-2.2	0.970	6.0	0.792	19.0	0.136	39.5	0.127	60.0	0.035	80.5	0.045
-2.0	0.975	6.2	0.779	19.5	0.156	40.0	0.135	60.5	0.041	81.0	0.042
-1.8	0.980	6.4	0.765	20.0	0.174	40.5	0.142	61.0	0.046	81.5	0.039
-1.6	0.984	6.6	0.751	20.5	0.189	41.0	0.147	61.5	0.052	82.0	0.036
-1.4	0.988	6.8	0.737	21.0	0.202	41.5	0.152	62.0	0.057	82.5	0.033
-1.2	0.991	7.0	0.723	21.5	0.213	42.0	0.156	62.5	0.061	83.0	0.030
-1.0	0.994	7.2	0.709	22.0	0.222	42.5	0.159	63.0	0.066	83.5	0.027
-0.8	0.996	7.4	0.694	22.5	0.229	43.0	0.161	63.5	0.070	84.0	0.024
-0.6	0.998	7.6	0.679	23.0	0.234	43.5	0.163	64.0	0.073	84.5	0.021
-0.4	0.999	7.8	0.664	23.5	0.237	44.0	0.163	64.5	0.077	85.0	0.018
-0.2	1.000	8.0	0.649	24.0	0.237	44.5	0.163	65.0	0.080	85.5	0.016
0.0	1.000	8.2	0.633	24.5	0.236	45.0	0.162	65.5	0.082	86.0	0.013
0.2	1.000	8.4	0.617	25.0	0.234	45.5	0.160	66.0	0.085	86.5	0.011
0.4	0.999	8.6	0.601	25.5	0.229	46.0	0.158	66.5	0.086	87.0	0.009
0.6	0,998	8.8	0.585	26.0	0.223	46.5	0.154	67.0	0.088	87.5	0.007
0.8	0.996	9.0	0.569	26.5	0.216	47.0	0.150	67.5	0.089	88.0	0.005
1.0	0.994	9.2	0.553	27.0	0.207	47.5	0.146	68.0	0.090	88.5	0.003
1.2	0.991	9.4	0.537	27.5	0.197	48.0	0.141	68.5	0.091	89.0	0.002
1.4	0.988	9.6	0.520	28.0	0.186	48.5	0.136	69.0	0.091	89.5	0.001
1.6	0.984	9.8	0.512	28.5	0.174	49.0	0.130	69.5	0.091	90.0	0.000
1.8	0.980	10.0	0.495	29.0	0.161	49.5	0.123	70.0	0.091		
2.0	0.975	10.2	0.479	29.5	0.147	50.0	0.116	70.5	0.090	1	
2.2	0.970	10.4	0.462	30.0	0.132	50.5	0.109	71.0	0.090]	



Tabulation of Average Elevations and Distances to the DTV Coverage Contour

Site Coordinates:

35° 33' 45" North Latitude

97° 29' 24" West Longitude

Antenna Radiation Center: 797 m AMSL

	3.2-16.1 km	Radiation Center Above		Distance to 36 dBµ, F(50,90) DTV
Azimuth	Terrain Avg.	Terrain Avg.	ERP	Coverage Contour
	(mAMSL)	(m)	(kW)	(km)
(deg. T)	(IIIAMSL) 353	(III) 444	33.1	113.6
0			$\begin{array}{c} 33.1 \\ 22.9 \end{array}$	110.8
15	347	450		
30	339	458	29.3	113.7
45	326	471	29.8	114.9
60	326	471	21.9	112.0
75	337	460	32.9	114.9
90	347	450	32.4	114.0
105	359	438	22.8	109.6
120	357	440	29 .3	112.1
135	355	442	32.5	113.2
150	359	438	25.3	110.6
165	359	438	15.7	106.2
180	363	434	6.09	97.7
195	360	437	1.37	86.6
210	360	437	0.14	68.6
218	360	437	0.001	33.7
225	359	438	0.07	62.2
240	379	418	0.64	79.4
255	380	417	4.46	94.3
270	367	430	14.4	104.8
285	357	440	25.6	110.9
300	345	$\boldsymbol{452}$	33.6	114.4
315	340	457	29.8	113.7
330	343	454	21.9	110.7
345	340	457	33.0	114.7
Average*	351	$\overline{446}$		

^{*} The average is for the eight standard radials.

NTSC Allocation Study for Proposed KOCO-DT Allotment Ch. 7, 37.5 kW (MAX-DA), 446 m

NAD 27 Site Coordinates:

35° 33' 45" North Latitude

97° 29' 24" West Longitude

Antenna Radiation Center: 797 mAMSL

		_Appendi	x B Data	Independent Calculations					**	
Ch. Relation- <u>ship</u>	Potentially Affected NTSC Station	Current Service <u>Pop.</u>	Allotted DTV <u>Interf.</u>	Current Service <u>Pop.</u>	Noise- Limited <u>Pop.</u>	Interf		New Interference from Prop. KOCO-DT		Cumulative <u>DTV Interf</u>
n-0	KOAM, Pittsburg, KS Ch. 7, 316 kW, 332 m	(Thous) 474	(%) 0.0	(Thous) 472	(Thous) 480	(Thous) 0	(%) 0.0	(Thous) 7	(%) 1.5	(%) 1.5
	KSWO-TV, Lawton, OK Ch. 7, 316 kW, 320 m	378	0.0	377	388	0	0.0	3	0.8	0.8
	KLTV, Tyler, TX Ch. 7, 316 kW, 302 m	619	0.0	611	686	0	0.0	0	0.0	0.0
n+1	KTUL, Tulsa, OK Ch. 8, 316 kW, 578 m	1,095	0.0	1,100	1,146	0	0.0	0	0.0	0.0
n-1	Not applicable									